

CLAIMS

1. A method of forming a stable cardiac graft in a mammal, said method comprising transplanting skeletal myoblasts and fibroblasts into the scar tissue of a heart,

5 wherein said skeletal myoblasts and fibroblasts survive in scar tissue in a heart after transplantation into said scar tissue, and wherein said skeletal myoblasts and fibroblasts improve cardiac function, relative to cardiac function of a heart having similar myocardial scar tissue that is not transplanted with said skeletal myoblasts.

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2. The method of claim 1, wherein cardiac function is assessed by at least one of the criteria in the group consisting of: area occupied by said scar tissue; vascularization of said scar tissue; blood flow to said scar tissue; developed pressure, systolic pressure; end diastolic pressure; and Δ pressure/ Δ time.

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3. The method of claim 1, wherein at least 10% of said scar tissue is occupied by transplanted cells four weeks after transplantation.

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4. The method of claim 1, wherein said graft is used for cardiomyoplasty.

5. The method of claim 1, wherein said graft is used for closing cardiac defects.

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6. The method of claim 1, wherein said graft is used for myocardial reconstructive surgery.